

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$  (wherein A represents at least one ion selected from the group consisting of  $Li^+$ ,  $Na^+$ ,  $K^+$ ,  $Pb^{2+}$ ,  $Ca^{2+}$ ,  $Sr^{2+}$ ,  $Ba^{2+}$ ,  $Bi^{3+}$  and  $La^{3+}$ , B represents at least one ion selected from the group consisting of  $Fe^{3+}$ ,  $Ti^{4+}$ ,  $Zr^{4+}$ ,  $Nb^{5+}$ ,  $Ta^{5+}$ ,  $W^{6+}$  and  $Mo^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $Si^{4+}$  or  $Ge^{4+}$  is included in the A site ion.

2. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$  (wherein A represents at least one ion selected from the group consisting of  $Li^+$ ,  $Na^+$ ,  $K^+$ ,  $Pb^{2+}$ ,  $Ca^{2+}$ ,  $Sr^{2+}$ ,  $Ba^{2+}$ ,  $Bi^{3+}$  and  $La^{3+}$ , B represents at least one ion selected from the group consisting of  $Fe^{3+}$ ,  $Ti^{4+}$ ,  $Zr^{4+}$ ,  $Nb^{5+}$ ,  $Ta^{5+}$ ,  $W^{6+}$  and  $Mo^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $Si^{4+}$  or  $Ge^{4+}$  is included in the A site ion; and

wherein the ferroelectric film is a solid solution with a dielectric shown by  $X_2SiO_5$ ,  $X_4Si_3O_{12}$ ,  $X_2GeO_5$  or  $X_4Ge_3O_{12}$  (wherein X represents  $Bi^{3+}$ ,  $Fe^{3+}$ ,  $Sc^{3+}$ ,  $Y^{3+}$ ,  $La^{3+}$ ,  $Ce^{3+}$ ,  $Pr^{3+}$ ,  $Nd^{3+}$ ,  $Pm^{3+}$ ,  $Sm^{3+}$ ,  $Eu^{3+}$ ,  $Gd^{3+}$ ,  $Tb^{3+}$ ,  $Dy^{3+}$ ,  $Ho^{3+}$ ,  $Er^{3+}$ ,  $Tm^{3+}$ ,  $Yb^{3+}$  or  $Lu^{3+}$ ).

3. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$  (wherein A represents at least one ion selected from the group consisting of  $Li^+$ ,  $Na^+$ ,  $K^+$ ,  $Pb^{2+}$ ,  $Ca^{2+}$ ,  $Sr^{2+}$ ,  $Ba^{2+}$ ,  $Bi^{3+}$

and  $\text{La}^{3+}$ , B represents at least one ion selected from the group consisting of  $\text{Fe}^{3+}$ ,  $\text{Ti}^{4+}$ ,  $\text{Zr}^{4+}$ ,  $\text{Nb}^{5+}$ ,  $\text{Ta}^{5+}$ ,  $\text{W}^{6+}$  and  $\text{Mo}^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  is included in the A site ion; and

wherein the ferroelectric film includes at least one transition element in an amount of 5 to 40 mol% in total, the transition element having the maximum positive valence which is +1 or more greater than the valence of the A site ion of the  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$ .

4. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$  (wherein A represents at least one ion selected from the group consisting of  $\text{Li}^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Pb}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Bi}^{3+}$  and  $\text{La}^{3+}$ , B represents at least one ion selected from the group consisting of  $\text{Fe}^{3+}$ ,  $\text{Ti}^{4+}$ ,  $\text{Zr}^{4+}$ ,  $\text{Nb}^{5+}$ ,  $\text{Ta}^{5+}$ ,  $\text{W}^{6+}$  and  $\text{Mo}^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  is included in the A site ion; and

wherein the ferroelectric film includes at least one transition element in an amount of 5 to 40 mol% in total, the transition element having the maximum positive valence which is +1 or more greater than the valence of the B site ion of the  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$ .

5. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$  (wherein A represents at least one ion selected from the group consisting of  $\text{Li}^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Pb}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Bi}^{3+}$  and  $\text{La}^{3+}$ , B represents at least one ion selected from the group consisting of  $\text{Fe}^{3+}$ ,  $\text{Ti}^{4+}$ ,  $\text{Zr}^{4+}$ ,  $\text{Nb}^{5+}$ ,  $\text{Ta}^{5+}$ ,  $\text{W}^{6+}$  and  $\text{Mo}^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  is included in the A site ion;

wherein the ferroelectric film includes at least one transition element having the maximum positive valence which is +1 or more greater than the valence of the B site ion of the  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$ ;

wherein the ferroelectric film includes at least one transition element having the maximum positive valence which is +1 or more greater than the valence of the A site ion of the  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$ ; and

wherein the transition elements are included in an amount of 5 to 40 mol% in the A and B sites in total.

6. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$  (wherein A represents at least one ion selected from the group consisting of  $Li^+$ ,  $Na^+$ ,  $K^+$ ,  $Pb^{2+}$ ,  $Ca^{2+}$ ,  $Sr^{2+}$ ,  $Ba^{2+}$ ,  $Bi^{3+}$  and  $La^{3+}$ , B represents at least one ion selected from the group consisting of  $Fe^{3+}$ ,  $Ti^{4+}$ ,  $Zr^{4+}$ ,  $Nb^{5+}$ ,  $Ta^{5+}$ ,  $W^{6+}$  and  $Mo^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $Si^{4+}$  or  $Ge^{4+}$  is included in the A site ion;

wherein the ferroelectric film is a solid solution with a dielectric shown by  $X_2SiO_5$ ,  $X_4Si_3O_{12}$ ,  $X_2GeO_5$  or  $X_4Ge_3O_{12}$  (wherein X represents  $Bi^{3+}$ ,  $Fe^{3+}$ ,  $Sc^{3+}$ ,  $Y^{3+}$ ,  $La^{3+}$ ,  $Ce^{3+}$ ,  $Pr^{3+}$ ,  $Nd^{3+}$ ,  $Pm^{3+}$ ,  $Sm^{3+}$ ,  $Eu^{3+}$ ,  $Gd^{3+}$ ,  $Tb^{3+}$ ,  $Dy^{3+}$ ,  $Ho^{3+}$ ,  $Er^{3+}$ ,  $Tm^{3+}$ ,  $Yb^{3+}$  or  $Lu^{3+}$ ); and

wherein the ferroelectric film includes at least one transition element in an amount of 5 to 40 mol% in total, the transition element having the maximum positive valence which is +1 or more greater than the valence of the A site ion of the  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$ .

7. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $ABO_3$  or  $(Bi_2O_2)^{2+}(A_{m-1}B_mO_{3m+1})^{2-}$  (wherein A represents at

least one ion selected from the group consisting of  $\text{Li}^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Pb}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Bi}^{3+}$  and  $\text{La}^{3+}$ , B represents at least one ion selected from the group consisting of  $\text{Fe}^{3+}$ ,  $\text{Ti}^{4+}$ ,  $\text{Zr}^{4+}$ ,  $\text{Nb}^{5+}$ ,  $\text{Ta}^{5+}$ ,  $\text{W}^{6+}$  and  $\text{Mo}^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  is included in the A site ion;

wherein the ferroelectric film is a solid solution with a dielectric shown by  $\text{X}_2\text{SiO}_5$ ,  $\text{X}_4\text{Si}_3\text{O}_{12}$ ,  $\text{X}_2\text{GeO}_5$  or  $\text{X}_4\text{Ge}_3\text{O}_{12}$  (wherein X represents  $\text{Bi}^{3+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Sc}^{3+}$ ,  $\text{Y}^{3+}$ ,  $\text{La}^{3+}$ ,  $\text{Ce}^{3+}$ ,  $\text{Pr}^{3+}$ ,  $\text{Nd}^{3+}$ ,  $\text{Pm}^{3+}$ ,  $\text{Sm}^{3+}$ ,  $\text{Eu}^{3+}$ ,  $\text{Gd}^{3+}$ ,  $\text{Tb}^{3+}$ ,  $\text{Dy}^{3+}$ ,  $\text{Ho}^{3+}$ ,  $\text{Er}^{3+}$ ,  $\text{Tm}^{3+}$ ,  $\text{Yb}^{3+}$  or  $\text{Lu}^{3+}$ ); and

wherein the ferroelectric film includes at least one transition element in an amount of 5 to 40 mol% in total, the transition element having the maximum positive valence which is +1 or more greater than the valence of the B site ion of the  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$

8. (Original) A ferroelectric film including a perovskite ferroelectric or a bismuth layer-structured ferroelectric shown by  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$  (wherein A represents at least one ion selected from the group consisting of  $\text{Li}^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Pb}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Bi}^{3+}$  and  $\text{La}^{3+}$ , B represents at least one ion selected from the group consisting of  $\text{Fe}^{3+}$ ,  $\text{Ti}^{4+}$ ,  $\text{Zr}^{4+}$ ,  $\text{Nb}^{5+}$ ,  $\text{Ta}^{5+}$ ,  $\text{W}^{6+}$  and  $\text{Mo}^{6+}$ , and m is a natural number),

wherein at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  is included in the A site ion;

wherein the ferroelectric film is a solid solution with a dielectric shown by  $\text{X}_2\text{SiO}_5$ ,  $\text{X}_4\text{Si}_3\text{O}_{12}$ ,  $\text{X}_2\text{GeO}_5$  or  $\text{X}_4\text{Ge}_3\text{O}_{12}$  (wherein X represents  $\text{Bi}^{3+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Sc}^{3+}$ ,  $\text{Y}^{3+}$ ,  $\text{La}^{3+}$ ,  $\text{Ce}^{3+}$ ,  $\text{Pr}^{3+}$ ,  $\text{Nd}^{3+}$ ,  $\text{Pm}^{3+}$ ,  $\text{Sm}^{3+}$ ,  $\text{Eu}^{3+}$ ,  $\text{Gd}^{3+}$ ,  $\text{Tb}^{3+}$ ,  $\text{Dy}^{3+}$ ,  $\text{Ho}^{3+}$ ,  $\text{Er}^{3+}$ ,  $\text{Tm}^{3+}$ ,  $\text{Yb}^{3+}$  or  $\text{Lu}^{3+}$ );

wherein the ferroelectric film includes at least one transition element having the maximum positive valence which is +1 or more greater than the valence of the B site ion of the  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$ ;

wherein the ferroelectric film includes at least one transition element having the maximum positive valence which is +1 or more greater than the valence of the A site ion of the  $\text{ABO}_3$  or  $(\text{Bi}_2\text{O}_2)^{2+}(\text{A}_{m-1}\text{B}_m\text{O}_{3m+1})^{2-}$ ; and

wherein the transition elements are included in an amount of 5 to 40 mol% in the A and B sites in total.

9. (Currently Amended) The ferroelectric film as defined in ~~claim 1~~, any of claims 1 to 8, wherein the ferroelectric film includes  $\text{Pb}(\text{Zr}, \text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the A site ion in an amount of 1% or more; and

wherein at least one transition element having the maximum positive valence of +3 or more is included in the A site in an amount of 5 to 40 mol% in total.

10. (Currently Amended) The ferroelectric film as defined in ~~claim 1~~, any of claims 1 to 8, wherein the ferroelectric film includes  $\text{Pb}(\text{Zr}, \text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the A site ion in an amount of 1% or more; and

wherein at least one transition element having the maximum positive valence of +5 or more is included in the B site in an amount of 5 to 40 mol% in total.

11. (Original) A ferroelectric film including  $\text{Pb}(\text{Zr}, \text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more,

wherein at least one transition element having the maximum positive valence of +3 or more is included in the Pb site;

wherein at least one transition element having the maximum positive valence of +5 or more is included in the Zr or Ti site; and

wherein the transition elements are included in an amount of 5 to 40 mol% in the Pb and Zr or Ti sites in total.

12. (Original) A ferroelectric film including  $\text{Pb}(\text{Zr}, \text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more,

wherein at least one of La and other lanthanoid series ions is included in the Pb site in an amount of 5 to 40 mol% in total.

13. (Original) A ferroelectric film including  $\text{Pb}(\text{Zr}, \text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more,

wherein at least one of Nb, V and W is included in the Zr or Ti site in an amount of 5 to 40 mol% in total.

14. (Original) A ferroelectric film including  $\text{Pb}(\text{Zr}, \text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more,

wherein at least one of La and other lanthanoid series ions is included in the Pb site, and at least one of Nb, V and W is included in the Zr or Ti site, in an amount of 5 to 40 mol% in the Pb and Zr or Ti sites in total.

15. (Currently Amended) The ferroelectric film as defined in ~~claim 11~~, any of claim 11 to 14, further including:

at least one of Nb, V and W in the Zr or Ti site in an amount twice the amount of Pb ion vacancy in the Pb site.

16. (Currently Amended) The ferroelectric film as defined in ~~claim 11~~ any of claims 11 to 14 is included (111)-oriented tetragonal crystals.

17. (Currently Amended) The ferroelectric film as defined in ~~claim 11~~ any of claims 11 to 14 is included (001)-oriented rhombohedral crystals.

18. (Original) A method of manufacturing a ferroelectric film including  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ , the method comprising:

using a sol-gel solution for forming  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more.

19. (Original) A method of manufacturing a ferroelectric film including  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ , the method comprising:

using a sol-gel solution for forming  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more,

wherein a mixed solution prepared by mixing a sol-gel solution for forming  $\text{PbZrO}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more with a sol-gel solution for forming  $\text{PbTiO}_3$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Pb site ion in an amount of 1% or more is used as the sol-gel solution for forming  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ .

20. (Original) A method of manufacturing a ferroelectric film including  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ , the method comprising:

using a sol-gel solution for forming  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$  in which the amount of Pb ranges from 90 to 120% of the stoichiometric composition of  $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ .

21. (Currently Amended) The ferroelectric film as defined in ~~claim 1~~, any of claims 1 to 8, wherein the ferroelectric film includes  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$  including at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the A site ion in an amount of 1% or more; and

wherein at least one transition element having the maximum positive valence of +4 or more is included in the A site in an amount of 5 to 40 mol% in total.

22. (Currently Amended) The ferroelectric film as defined in ~~claim 1~~, any of claims 1 to 8, wherein the ferroelectric film includes  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$  including at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the A site ion in an amount of 1% or more; and

wherein at least one transition element having the maximum positive valence of +5 or more is included in the B site in an amount of 5 to 40 mol% in total.

23. (Original) A ferroelectric film including  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$  including at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Bi site ion in an amount of 1% or more,

wherein at least one transition element having the maximum positive valence of +4 or more is included in the Bi site;

wherein at least one transition element having the maximum positive valence of +5 or more is included in the Ti site; and

wherein the transition elements are included in an amount of 5 to 40 mol% in the Bi and Ti sites in total.



24. (Original) A ferroelectric film including  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$  including at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Bi site ion in an amount of 1% or more,  
wherein at least one of Nb, V and W is included in the Ti site in an amount of 5 to 40 mol% in total.

25. (Currently Amended) The ferroelectric film as defined in ~~claim 23~~, claim 23 or 24, further including:  
at least one of Nb, V, and W in the Ti site in an amount twice the amount of Bi ion vacancy in the Bi site.

26. (Currently Amended) The ferroelectric film as defined in ~~claim 23~~ claim 23 or 24 is included (111), (110), and (117) oriented orthorhombic crystals.

27. (Original) A method of manufacturing a ferroelectric film including  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ , the method comprising:  
using a sol-gel solution for forming  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$  which includes at least four-fold coordinated  $\text{Si}^{4+}$  or  $\text{Ge}^{4+}$  in the Bi site ion in an amount of 1% or more.

28. (Original) A method of manufacturing a ferroelectric film including  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ , the method comprising:  
using a mixed solution prepared by mixing a solution prepared by mixing a sol-gel solution for forming  $\text{Bi}_2\text{O}_3$  with a sol-gel solution for forming  $\text{TiO}_2$  at a molar ratio of 2:3 with a sol-gel solution for forming a dielectric shown by  $\text{X}_2\text{SiO}_5$ ,  $\text{X}_4\text{Si}_3\text{O}_{12}$ ,  $\text{X}_2\text{GeO}_5$ , or  $\text{X}_4\text{Ge}_3\text{O}_{12}$  (wherein X represents  $\text{Bi}^{3+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Sc}^{3+}$ ,  $\text{Y}^{3+}$ ,  $\text{La}^{3+}$ ,  $\text{Ce}^{3+}$ ,  $\text{Pr}^{3+}$ ,  $\text{Nd}^{3+}$ ,  $\text{Pm}^{3+}$ ,  $\text{Sm}^{3+}$ ,

Eu<sup>3+</sup>, Gd<sup>3+</sup>, Tb<sup>3+</sup>, Dy<sup>3+</sup>, Ho<sup>3+</sup>, Er<sup>3+</sup>, Tm<sup>3+</sup>, Yb<sup>3+</sup>, or Lu<sup>3+</sup>) so that Si<sup>4+</sup> or Ge<sup>4+</sup> is included in an amount of 1 mol% or more.

29. (Original) A method of manufacturing a ferroelectric film including Bi<sub>4</sub>Ti<sub>3</sub>O<sub>12</sub>, the method comprising:

using a sol-gel solution for forming Bi<sub>4</sub>Ti<sub>3</sub>O<sub>12</sub> in which an excess amount of Bi ranges from 90 to 120% of the stoichiometric composition of Bi<sub>4</sub>Ti<sub>3</sub>O<sub>12</sub>.

30. (Currently Amended) A ferroelectric memory comprising the ferroelectric film as defined in ~~claim 1~~, claim 1-8, 11-14 and 23-24.

31. (Currently Amended) A piezoelectric device comprising the ferroelectric film as defined in ~~claim 1~~, claim 1-8, 11-14 and 23-24.